

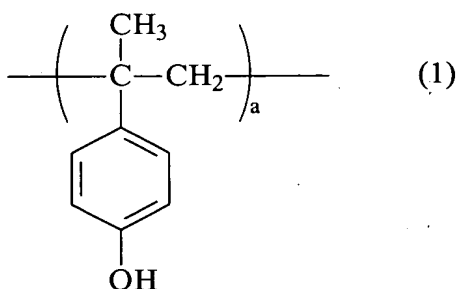
AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

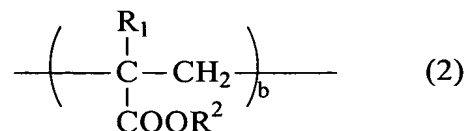
LISTING OF CLAIMS:

1.-23. (Canceled)

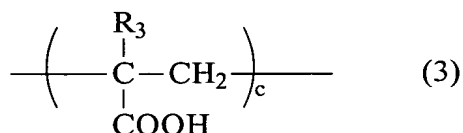
24. (New) A positive ultraviolet sensitive resist whose part irradiated with ultraviolet rays is soluble or dispersible in an organic solvent or an aqueous developing solution, and whose unirradiated part is substantially insoluble and undispersible in an organic solvent or an aqueous developing solution, said resist composition comprising a base polymer, an ether-bond-containing olefinic unsaturated compound and an acid-generating agent, where the base polymer is a copolymer comprising the structural units represented by formula (1):



formula (2):



where R¹ is hydrogen or methyl and R² is C₁-C₆ straight or branched unsubstituted alkyl or C₁-C₆ straight or branched substituted alkyl, and formula (3):



where R³ is hydrogen or methyl,

wherein a, b and c are 0.05 to 0.7, 0.15 to 0.8 and 0.01 to 0.5, respectively and a+b+c=1.

25. (New) The positive ultraviolet sensitive resist claimed in claim 24, where a compounding ratio of the copolymer comprising the structural units represented by formulas (1) to (3) and the ether-bond-containing olefinic unsaturated compound is 0.5 to 50/99.5 to 50 wt% as a ratio of copolymer/unsaturated compound based on their total wt% values, and the amount of the acid-generating agent is 0.1 to 40 wt parts to 100 wt parts of the total amount of the copolymer and the olefinic unsaturated compound.

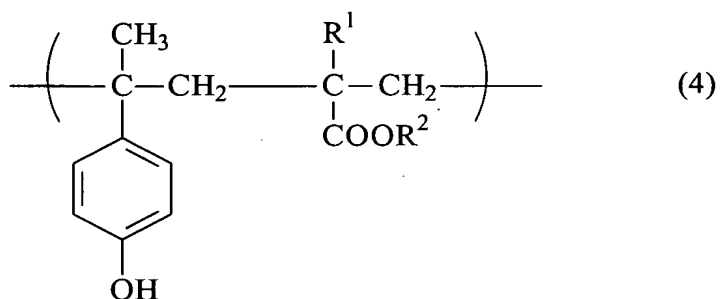
26. (New) The positive ultraviolet sensitive resist claimed in claim 24, where R^2 in the structural unit represented by formula (2) is C_1-C_6 straight or branched unsubstituted alkyl or C_1-C_6 straight or branched hydroxylated alkyl.

27. (New) The positive ultraviolet sensitive resist claimed in claim 26, where R^2 in the structural unit represented by formula (2) is selected from the group consisting of methyl, ethyl, n-propyl, isopropyl, n-butyl, isobutyl, sec-butyl and 2-hydroxyethyl.

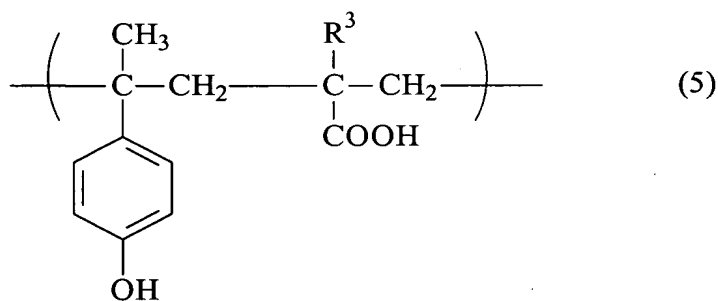
28. (New) The positive ultraviolet sensitive resist claimed in claim 24 where a material giving the structural unit represented by formula (2) is a (meth)acrylate selected from the group consisting of methyl acrylate, ethyl acrylate, n-propyl acrylate, isopropyl acrylate, n-butyl acrylate, isobutyl acrylate, sec-butyl acrylate, 2-hydroxyethyl acrylate, methyl methacrylate, ethyl methacrylate, n-propyl methacrylate, isopropyl methacrylate, n-butyl methacrylate, isobutyl methacrylate, sec-butyl methacrylate and 2-hydroxyethyl methacrylate.

29. (New) The positive ultraviolet sensitive resist claimed in claim 24 where for the copolymer, a in formula (1) is 0.20 to 0.45, b in formula (2) is 0.25 to 0.70, and c in formula (3) is 0.15 to 0.40, and $a+b+c=1$.

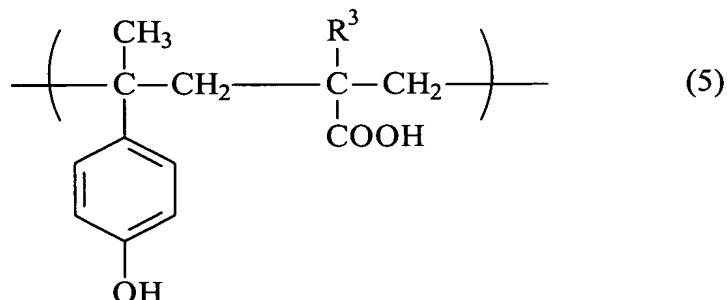
30. (New) The positive ultraviolet sensitive resist claimed in claim 24 where the copolymer comprising the structural units represented formulas (1), (2) and (3) is an alternating copolymer comprising the structural units represented by formula (4):



where R^1 is hydrogen or methyl and R^2 is $\text{C}_1\text{-C}_6$ straight or branched unsubstituted alkyl or $\text{C}_1\text{-C}_6$ straight or branched substituted alkyl, and formula (5):

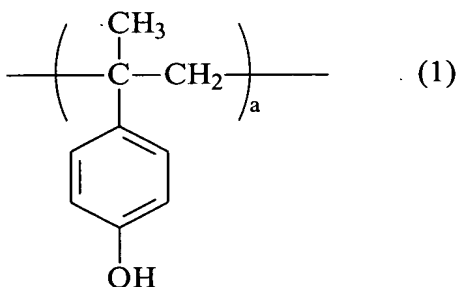


where R^3 is hydrogen or methyl, in which the total or branched unsubstituted alkyl or $\text{C}_1\text{-C}_6$ straight or branched alkyl, and formula (5):

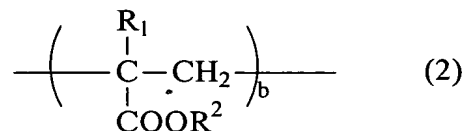


where R³ is hydrogen or methyl, in which the total content of these structural units is at least 60 mol %.

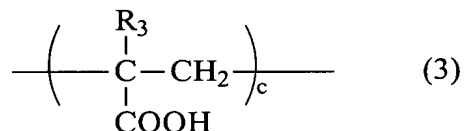
31. (New) A positive thermally sensitive resist whose part irradiated with heat rays is soluble or dispersible in an organic solvent or an aqueous developing solution, and whose unirradiated part is substantially insoluble and undispersible in an organic solvent or an aqueous developing solution, said resist comprising a base polymer, an ether-bond-containing olefinic unsaturated compound and an acid-generating agent, where the base polymer is a copolymer comprising the structural units represented by formula (1):



formula (2):



where R¹ is hydrogen or methyl and R² is C₁-C₆ straight or branched unsubstituted alkyl or C₁-C₆ straight or branched substituted alkyl, and formula (3):



where R³ is hydrogen or methyl,

wherein a, b and c are 0.05 to 0.7, 0.15 to 0.8 and 0.01 to 0.5, respectively and a+b+c=1.

32. (New) The positive thermally sensitive resist claimed in claim 31 where a compounding ratio of the copolymer comprising the structural units represented by formulas (1) to (3) and the ether-bond-containing olefinic unsaturated compound is 0.5 to 50/99.5 to 50 wt% as a ratio of copolymer/unsaturated compound based on their total wt% values, and the amount of the acid-generating agent is 0.1 to 40 wt parts to 100 wt parts of the total amount of the copolymer and the olefinic unsaturated compound.

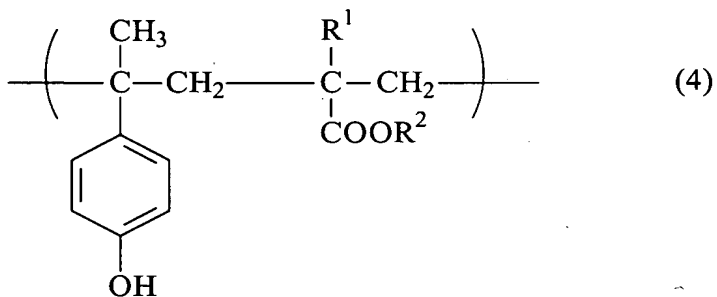
33. (New) The positive thermally sensitive resist claimed in claim 31 where R^2 in the structural unit represented by formula (2) is C_1-C_6 straight or branched unsubstituted alkyl or C_1-C_6 straight or branched hydroxylated alkyl.

34. (New) The positive thermally sensitive resist claimed in claim 33 where R^2 in the structural unit represented by formula (2) is selected from the group consisting of methyl, ethyl, n-propyl, isopropyl, n-butyl, isobutyl, sec-butyl and 2-hydroxyethyl.

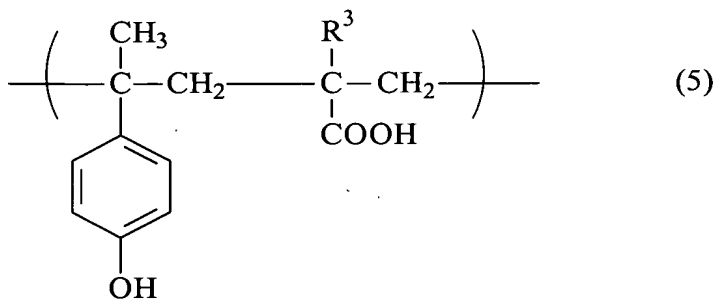
35. (New) The positive thermally sensitive resist claimed in claim 31 where a material giving the structural unit represented by formula (2) is a (meth)acrylate selected from the group consisting of methyl acrylate, ethyl acrylate, n-propyl acrylate, isopropyl acrylate, n-butyl acrylate, isobutyl acrylate, sec-butyl acrylate, 2-hydroxyethyl acrylate, methyl methacrylate, ethyl methacrylate, n-propyl methacrylate, isopropyl methacrylate, n-butyl methacrylate, isobutyl methacrylate, sec-butyl methacrylate and 2-hydroxyethyl methacrylate.

36. (New) The positive thermally sensitive resist claimed in claim 31 where for the copolymer, a in formula (1) is 0.20 to 0.45, b in formula (2) is 0.25 to 0.70, and c in formula (3) is 0.15 to 0.40, and $a+b+c=1$.

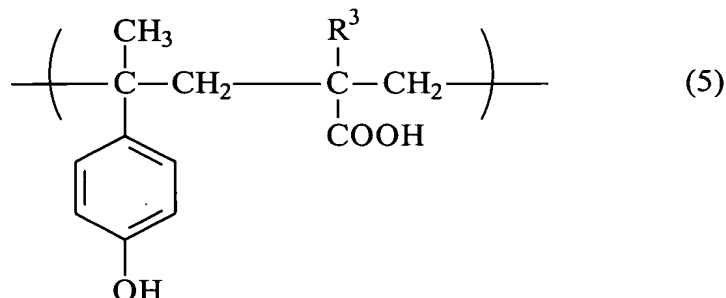
37. (New) The positive thermally sensitive resist claimed in claim 31 where the copolymer comprising the structural units represented formulas (1), (2) and (3) is an alternating copolymer comprising the structural units represented by formula (4):



where R^1 is hydrogen or methyl and R^2 is C_1 - C_6 straight or branched unsubstituted alkyl or C_1 - C_6 straight or branched substituted alkyl, and formula (5):

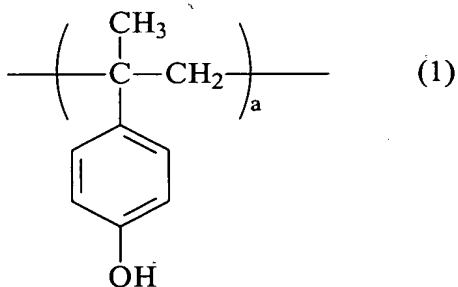


where R^3 is hydrogen or methyl, in which the total or branched unsubstituted alkyl or C_1 - C_6 straight or branched alkyl, and formula (5):

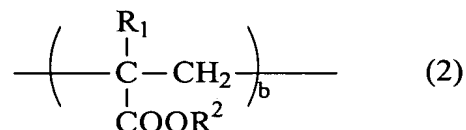


where R³ is hydrogen or methyl, in which the total content of these structural units is at least 60 mol%.

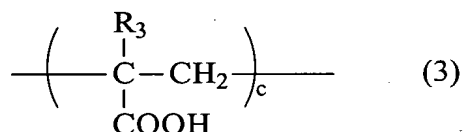
38. (New) A positive visible-light sensitive resist whose part irradiated with visible light is soluble or dispersible in an organic solvent or an aqueous developing solution, and whose unirradiated part is substantially insoluble and undispersible in an organic solvent or an aqueous developing solution, said resist comprising a photosensitizer and a composition comprising a base polymer, an ether-bond-containing olefinic unsaturated compound and an acid-generating agent, where the base polymer is a copolymer comprising the structural units represented by formula (1):



formula (2):



where R¹ is hydrogen or methyl and R² is C₁-C₆ straight or branched unsubstituted alkyl or C₁-C₆ straight or branched substituted alkyl, and formula (3):



where R³ is hydrogen or methyl,

wherein a, b and c are 0.05 to 0.7, 0.15 to 0.8 and 0.01 to 0.5, respectively and a+b+c=1.

39. (New) The positive visible-light sensitive resist as claimed in claim 38 where a compounding ratio of the copolymer comprising the structural units represented by formulas (1) to (3) and the ether-bond-containing olefinic unsaturated compound is 0.5 to 50/99.5 to 50 wt% as a ratio of copolymer/unsaturated compound based on their total wt% values; the amount of the acid-generating agent is 0.1 to 40 wt parts to 100 wt parts of the total amount of the copolymer and the olefinic unsaturated compound; and the amount of the photosensitizer is 0.1 to 20 wt parts to 100 wt parts of the total amount of the copolymer, the olefinic unsaturated compound and the acid-generating agent.

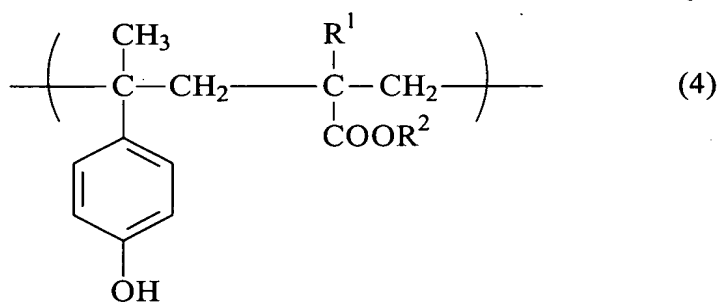
40. (New) The positive visible-light sensitive resist as claimed in claim 38 where R^2 in the structural unit represented by formula (2) is C_1-C_6 straight or branched unsubstituted alkyl or C_1-C_6 straight or branched hydroxylated alkyl.

41. (New) The positive visible-light sensitive resist as claimed in claim 40 where R^2 in the structural unit represented by formula (2) is selected from the group consisting of methyl, ethyl, n-propyl, isopropyl, n-butyl, isobutyl, sec-butyl and 2-hydroxyethyl.

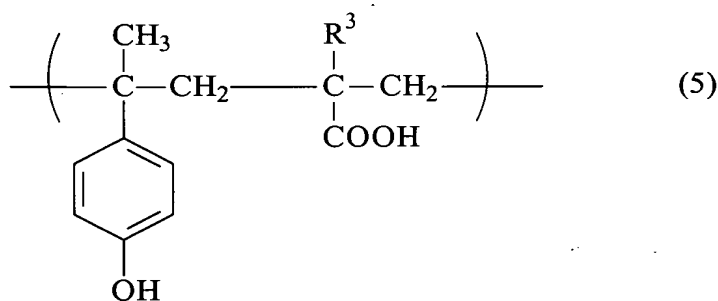
42. (New) The positive visible-light sensitive resist as claimed in claim 38 where a material giving the structural unit represented by formula (2) is a (meth)acrylate selected from the group consisting of methyl acrylate, ethyl acrylate, n-propyl acrylate, isopropyl acrylate, n-butyl acrylate, isobutyl acrylate, sec-butyl acrylate, 2-hydroxyethyl acrylate, methyl methacrylate, ethyl methacrylate, n-propyl methacrylate, isopropyl methacrylate, n-butyl methacrylate, isobutyl methacrylate, sec-butyl methacrylate and 2-hydroxyethyl methacrylate.

43. (New) The positive visible-light sensitive resist as claimed in claim 38 where for the copolymer, a in formula (1) is 0.20 to 0.45, b in formula (2) is 0.25 to 0.70, and c in formula (3) is 0.15 to 0.40, and $a+b+c=1$.

44. (New) The positive visible-light sensitive resist claimed in claim 38 where the copolymer comprising the structural units represented formulas (1), (2) and (3) is an alternating copolymer comprising the structural units represented by formula (4):



where R¹ is hydrogen or methyl and R² is C₁-C₆ straight or branched unsubstituted alkyl or C₁-C₆ straight or branched substituted alkyl, and formula (5):



where R³ is hydrogen or methyl, in which the total content of these structural units is at least 60 mol%.